### 4 Statewide Conservation Actions

The stressors that affect wildlife, and the conservation actions needed to address them and restore and conserve ecosystems and wildlife populations, were analyzed in each region of the state. While some stressors are significant in only a few regions, others are pervasive across the state. Similarly, some conservation actions are important for a few regions, while other conservation actions are needed throughout the state or are more appropriately implemented through a statewide program.

#### Recommended Statewide Conservation Actions

Conservation actions were considered for each region, based on the stressors and circumstances of the regions. Statewide conservation actions are those actions that are important across most or all regions. The following are recommended statewide conservation actions:

- a. The state should develop policies and incentives to facilitate better integration of wildlife conservation considerations into local and regional planning and land-use decision-making.
  - Wildlife agencies should establish regional goals for species and habitat protection and work with city, county, and state agency land-use planning processes to accomplish them.
  - The state should expand Fish and Game's capacity to assist local and regional agencies with conservation planning and implementation.

See also the Conservation Planning section in Chapter 6.

b. Permitting agencies, county planners, and land management agencies should work to ensure that infrastructure development projects are designed and sited to avoid harmful effects on sensitive species and habitats.

Wherever possible, infrastructure development projects should be sited near existing urban areas and development corridors and away from areas that are relatively undeveloped or with significant biological resources.

- c. The state should develop policies and incentives to better integrate wildlife conservation into state and regional transportation planning. Wildlife considerations need to be incorporated early in the transportation planning process.
  - Transportation systems and corridors should be retrofitted to better accommodate wildlife.
  - Stewardship of existing transportation facilities should include better consideration of wildlife needs.
- d. State and federal agencies should work with cities and counties to secure sensitive habitats and key habitat linkages.
  - State and federal wildlife agencies, working with nongovernmental organizations, should inventory and evaluate sensitive wildlife habitat and key habitat linkage areas.
  - Public land managers should protect wildlife habitat linkages on public lands.
  - Lead planning agencies should incorporate habitat linkages and other identified key habitats into conservation plans. Regional conservation plans should include adaptive management provisions to accommodate protecting important wildlife linkages as they are identified.
  - The state should partner with federal and local land managers, land trusts, and conservancies to prioritize and secure, through purchase, swaps, or easements, important habitat linkages and other priority sites that are not now protected.
- e. State and local agencies should allocate sufficient water for ecosystem uses and wildlife needs when planning for and meeting regional water supply needs.
  - Incorporate water-for-wildlife considerations into regional integrated water planning.
  - Develop water budgets for individual watersheds, assessing and accounting for available water resources, groundwater recharge goals, aquatic species' flow requirements, and current and forecasted water supply needs. Create water use-and-supply plans that do not overdraft groundwater and that provide suitable groundwater and surface water flows for aquatic species.
  - Establish and implement minimum flows and flow requirements that mimic, as closely as possible, natural seasonal high- and low-flow patterns.
  - Secure long-term contracts for water for instream flows and for wetlands.

- Preserve or purchase lands with water rights and lease or acquire water rights from willing sellers to protect instream flows. Conservation interests should look for opportunities to protect lands that both preserve instream flows and support other sensitive resources.
- Assess and catalog existing water diversions and monitor compliance with permitted water rights. Remove unauthorized diversions. Use diversion structures that allow water diversion only when minimum flow requirements are met.

## f. Federal, state, and local agencies should provide greater resources and coordinate efforts to eradicate or control existing occurrences of invasive species and to prevent new introductions.

- Work in cooperation with private organizations, pest control councils, coordinated weed management areas, and conservation organizations and agencies to develop and implement prevention, eradication, and control programs for invasive species.
- Develop a rapid response capacity to identify and eradicate invasive species, with a rapid response team and emergency fund to tackle new invasions (possibly modeled after the Office of Spill Prevention and Response program). Cooperative Weed Management Areas groups, watershed groups, and resource conservation districts could be part of the rapid response team.
- Increase research and monitoring of exotic species that compete with, predate, or parasitize sensitive native species or degrade important habitats.
- Update and publish watch lists of highly invasive species and maps of occurrences of invasive species.
- Engage key stakeholders and the public in ways they can reduce the threat to native wildlife posed by invasive species.
- Adopt agency policies and encourage the use of weed-free materials in restoration projects, erosion control, post-fire seeding and other land management projects.

# g. Federal, state, and local agencies and nongovernmental conservation organizations, working with private landowners and public land managers, should expand efforts to restore and conserve riparian communities.

- Redesign flood control strategies and infrastructure to allow the restoration of riparian communities. Elements of riparian conservation involve restoring more natural flow regimes, accommodating over-bank flooding, enlarging levee set-backs, and removing **riprap** in some areas.
- Elevate as a conservation priority and increase funding for restoration and conservation of riparian communities.
- Enhance programs and incentives to assist ranchers, farmers, and other landowners to restore and conserve riparian communities.

- h. Federal, state, tribal, and local agencies and nongovernmental organizations, working with private landowners, should expand efforts to implement agricultural and rangeland management practices that are compatible with wildlife and habitat conservation.
  - Use existing programs (particularly Natural Resources Conservation Service programs) that provide funding and technical expertise for such practices. Public agencies, including Fish and Game, should assist landowners in navigating the permitting processes necessary to receive assistance under these programs. Nongovernmental organization partners should include groups such as the California Rangeland Trust, the California Cattlemen's Associations, the Community Alliance with Family Farmers, the Elkhorn Slough Foundation, and local land trusts.
  - Expand partnerships among regional water quality control boards and interests from the agricultural industry to implement management practices that protect environmental quality.
  - Support and develop certification and labeling programs that increase the market value of
    agricultural and livestock products produced using ecologically sustainable management
    practices, such as protection of riparian areas, efficient use of water, reduced application
    of agricultural chemicals, promotion of oak regeneration, and control of invasive species.
    Develop guidance documents and technical consultation processes for implementation of these
    management practices, as well as processes for field inspections and certification.
  - Encourage livestock operators with grazing leases on public lands to institute ecologically sustainable grazing practices. Incentive systems should be established to reduce costs for operators who follow such practices.
  - Work with private landowners to retire crop lands that are marginally productive but ecologically important for wildlife.

See also Appendix G, Information Sources for Wildlife and Habitat Conservation on Private Lands.

i. In their conservation planning and ecosystem restoration work, state and federal wildlife agencies and land managers should consider the most current projections of the effects of global warming.

Global warming is expected to have major consequences for ecosystems and wildlife populations throughout the state. Projected changes are important factors to consider when planning long-term conservation or restoration projects.

j. The state and federal governments should give greater priority to wildlife and natural resources conservation education.

Conservation efforts will be less successful if the public does not appreciate the state's wildlife resources or understand the conservation challenges facing the most biologically diverse state in the nation. The state should:

- Encourage wildlife conservation education in formal education, particularly in grades K-12.
- Expand efforts to connect Californians to the state's natural resources through expanded formal and nonformal education programs in outdoor settings.
- Devote greater resources to enhancing education regarding conservation of wildlife and natural resources in the urban population.
- Educate the public about the need for sound water management policy and large-scale conservation planning that support a diverse and sustainable fish and wildlife resource.
- Educate the public on ways to avoid wildlife-human conflicts.
- k. The state should strengthen its capacity to implement conservation actions and to assist local agencies and landowners with planning and implementation of wildlife and habitat restoration and conservation efforts.

See also Chapter 6, Strengthening California's Conservation Capabilities.

1. Working with the Department of Defense, the state and conservation organizations should expand efforts to secure important wildlife habitat that also serves as development buffer zones around military bases and training grounds.

A collaborative effort of the Department of Defense, the Nature Conservancy, the Wildlife Conservation Board, and the California Resources Agency has funded the establishment of a wildlands buffer around La Posta Navy Mountain Warfare Training Center east of San Diego. A similar effort is being made to secure important wildlife habitat around Camp Pendleton in the South Coast Region. There are numerous areas around bases across the state where it is in the interest of conservation and military operations to establish wildland buffers.

m. Permitting agencies, county and local planners, and land management agencies should work to ensure that infrastructure development projects are designed and sited to avoid harmful effects on sensitive species and habitats.

As demands for roads, power, water, and waste disposal sites grow, efforts should be made to update and upgrade existing infrastructure to meet those needs. For example, rather than developing additional wind farms, existing wind farms can be updated to produce more elec-

tricity per windmill, and transmission lines can be upgraded to higher-voltage lines to avoid the need for new utility corridors across undeveloped lands.

Wherever possible, infrastructure development projects should be sited near existing urban areas and development corridors and away from areas that are relatively undeveloped or with significant biological resources.

If new landfill facilities are built in the region, permitting agencies should work with project developers to ensure that all possible measures are taken to prevent environmental impacts, such as using closed-top landfill pits and reliably sealed liners to prevent water and soil contamination.

n. To address habitat fragmentation and avoid the loss of key wildlife corridors, federal, state and local agencies, along with nongovernmental organizations, should support scientific studies to identify key wildlife habitat linkages throughout the state.

The South Coast Missing Linkages Project has identified key wildlife corridors in South Coast Region. A similar effort is needed in each region of the state.

- o. The state should provide scientific and planning assistance and financial incentives to local governments to develop and implement regional multispecies conservation plans for all of the rapidly developing areas.
- p. While numerous private landowners are leaders in conservation, Fish and Game, the U.S. Fish and Wildlife Service, the USDA Natural Resources Conservation Service, and local resource conservation districts need to expand efforts to improve conservation and restoration on private lands by assisting private landowners.
- q. State and federal government should give greater priority to funding and staffing of wildlife and natural resource law enforcement efforts.

Effective conservation requires law enforcement, which is a basic and essential element of resource protection. State and federal agencies should:

- Review law enforcement staffing levels and deployment and encourage increased staff to provide adequate protection.
- Develop greater resources to enhance law enforcement's ability to maintain officers in the field through operating-budget augmentations, salary improvements, and equipment purchases.

### **Recommended Region-Specific Conservation Actions**

Implementing the statewide conservation actions and the region-specific conservation actions is necessary to restore and conserve ecosystems and wildlife populations. For the recommended region-specific conservation actions, see Section 4 in each of the regional chapters.

### **Conservation Action Workshops**

In the course of the regional reviews of stressors affecting wildlife and habitats and the actions needed to restore and conserve wildlife diversity, several key issues surfaced repeatedly. In spring 2005, the Plan development team convened workshops to identify challenges and opportunities regarding several of these key issues and to develop recommendations for action. Summaries of the workshop results and recommendations may be found on the Web at http://www.dfg.ca.gov/habitats/wdp/.